DOCUMENT RESUME

ED 267 539 EC 182 059

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TITLE Microcomputer Useage for Data Based Psychomotor Performance Measures in Adapted Physical Education.
INSTITUTION Montana Univ., Missoula.
SPONS AGENCY Office of Special Education and Rehabilitative Services (ED), Washington, DC. Div. of Personnel Preparation.
PUB DATE Oct 85
NOTE 11p.; Paper presented at the Northern Rocky Mountain Education Research Symposia "A Data Based Approach to the Psychomotor Development of Profoundly/Severely Handicapped Children Preschool through Secondary Levels" (Jackson, WY, October 10-12, 1985).
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adapted Physical Education; *Computer Assisted Instruction; *Curriculum Development; Elementary Secondary Education; *Physical Education; Psychomotor Skills; *Severe Disabilities; Teacher Role

ABSTRACT

The paper describes Project RISPE (Rural/Remote Interdisciplinary Special Physical Education) and its data-based psychomotor curriculum for profoundly/severely handicapped children ages 0-21. The curriculum, divided into five diagnostic/prescriptive areas (placement, baseline, instruction, post-test, and maintenance), includes over 300 specific performance objectives. The computerized program for the data management system includes both descriptive and statistical records. Suggestions are offered for helping adapted physical education educators to integrate the computer into their psychomotor or sport programs for handicapped children by informally familiarizing them with computers. (CL)

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Submitted To:

Northern Rocky Mountain Educational Research Association Symposia

"A Data Based Approach to the Psychomotor Development of Profoundly/Severely Handicapped Children Preschool Through Secondary Levels"

Jackson, Wyoming

October 10, 11, 12, 1985

EC182359

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Microcomputer Useage For Data Based Psychomotor Performance Measures In Adapted Physical Education

In 1984, the University of Montana received a USOSE personnel preparation grant, Project RISPE (i.e. Rural/Remote Interdisciplinary Special Physical Education) to improve and increase the number of qualified personnel in Adapted Physical Education to meet the physical education and lifetime sport needs of profoundly/severely handicapped children and youth in the State of Montana. A significant component of the project involved the development, piloting, field-testing, and implementation of a data based psychomotor curriculum for profoundly/severely handicapped children ages 0-21. Thus, the RISPE curriculum was developed in response to a documented need for physical education and lifetime sport activity needs of handicapped children in rural/remote school settings.

The RISPE data based curriculum is divided into three basic psychomotor components for severely handicapped children preschool through secondary levels. It is currently in further product development to include three specific wheelchair and three specific lifetime sport components (figure 1). Within each component there are six goal areas that are further task analyzed into a sequential series of performance objectives. Performance objectives are further delineated into skill levels (i.e. (1) function and (2) age appropriate proficiency) and precision teaching strategies for introductory, intermediate, and concluding child psychomotor performances. Also provided are interdisciplinary activities that can be used to assist special education and regular physical education personnel in developing and implementing prescriptive motor and lifetime sport programs for severely handicapped children according to the mandates of PL 94-142.

The RISPE curriculum was designed to be used in a transdisciplinary manner with special education classroom teachers. It was designed this way because it

	Preschool	Elementary	Secondary
Component	Psychomotor	Psychomotor	Psychomotor
Goal Areas	Locomotor Skills Object Control Body Awareness Body Control Fitness/Growth Posture	Locomotor Skills Object Control Body Awareness Body Control Fitness/Growth Posture	Locomotor Skills Object Control Body Awareness Body Control Fitness/Growth Posture
Component	Wheelchair	Wheelchair	Wheelchair
Goal Areas	Locomotor Skills Object Control Body Awareness Body Control Fitness/Growth Posture	Locomotor Skills Object Control Body Awareness Body Control Fitness/Growth Posture	Locomotor Skills Object Control Body Awareness Body Control Fitness/Growth Posture
Component	Sport & Leisure	Sport & Leisure	Sport & Leisure
Goal Areas	Group Activities Low Organized Games	Low Organized Games Lead-up Games Low Organized Sports	Low Organized Sports Individual/Dual Sports Team Sports

Figure 1. OVERVIEW OF RISPE DATA BASED CURRICULUM FOR PROFOUNDLY/SEVERELY HANDICAPPED 0-21

is largely the responsibility of special education teachers to provide physical education and non-academic services (i.e. athletics) to severely handicapped children, not physical educators. It was piloted and field-tested with over 130 profoundly/severely handicapped children, preschool-secondary, in 37 rural/remote schools in Western Montana.

The RISPE curriculum is divided into five diagnostic/prescriptive areas (i.e. (1) placement; (2) baseline; (3) instruction; (4) post-test; and, (5) maintenance). There are assessment inventories for each component and over 300 specific performance objectives. As a result of this massive data base, a customized microcomputer program had to be devised to treat and utilize the data fully.

A RISPE data management scheme was created and implemented to maximize the computer technology of the Apple Macintosh. The Macintosh was selected because of its extremely user friendly characteristics as well as its powerful capabilites and applications. The program was developed to be used with an external drive and a 512K memory. However, it can be used without the external drive. For use in programs with large numbers of children served, a hyperdrive and hard disk are suggested. Further, all data and IEP's can be transformed into user products with an imagewriter printer. This capability has been of tremendous value in sharing child progress with parents, administration, and other interested professionals.

As stated, due to the sheer volume of teaching research data gathered on a longitudinal basis a computerized and automated data management scheme on microcomputer was necessary. However, the characteristics of the data also presented some unique problems requiring customized computer technology. Thus, the computerized program for the data management system includes both descriptive and statistical records (i.e. performance) that are married for statistical treatment. It has microsoft basic (D) and (B) programming capabilities in addition to being specifically developed and customized only for RISPE data based psychomotor

curriculum data collection and treatment. Copies can be easily made from the system disk so that the program can be fully operational and integrated into a variety of physical education and special education programs within public schools.

Lambert (1984) stated that professionals who accurately interpret information thrive and grow stronger; those who don't, drown. Therefore, information without understanding is not merely meaningless, it is counterproductive. An adapted physical educator can use the RISPE data based curriculum and microcomputer management scheme to distill a large quantity of information and grasp the essence of complex psychomotor performance of severely handicapped individuals. They can pass this essence on to other professionals, in such a manner that they, too can understand it. Thus, adapted physical educators can also, by microcomputer technology and editorializing psychomotor information, influence positively the beliefs and decisions of special education professionals, parents, and disabled children themselves.

The widening split between production and consumption in special education is forcing a change in the way school administrators deal with time. In the new market-dependent educational system, time equals money. Tax based paid professionals in special education cannot be allowed to idle since they operate typically on schedules of their own. This is especially true of adapted physical educators, who still, often remain a luxury in the majority of school systems. Toffler (1980) referred to this as the third principle of industrial civilization: synchronization. Consequently, physical education and sport opportunities for handicapped children and youth must yield a product commensurate with school time and money if it has any hope of emerging into a fully accepted component of public school curricular and extracurricular activities.

An efficient means of synthesizing the void between an industrial oriented school system and a technologically oriented society is by the effective use of

computers. The RISPE computerized data based curriculum allows for adapted physical educators to maintain the integrity of an industrialized educational system (i.e. standardization, specialization, synchronization, concentration, maximization, centralization) while promoting a new synthesis for the physical capabilities of handicapped children and youth responsive to an atmosphere of creation in our emerging technological society.

The request for appropriate psychomotor and sport experiences for the handicapped spring from deep pyschological, economic and political forces. At one level they arise from the changed nature of the population. Yet, at another level they can be traced to a new range of technologies advancing into our professional workplaces. Technology is also redefining our professional workschedules and conception of time. The computer has made time flexible as well as facilitating complex interweaving of communication patterns.

Educational systems are clumsily synchronized to one another, and special education professionals are further synchronized to operational processes of PL 94-142 along with the numerous social and political consequences which followed and are still in effect today. Basically, public school system synchronization shackles the professional to federal and state legislatively mandated operational and funding process to imprision all special educators and many regular educators into a common network of adverse professional consequences. With computer technology, full advantage of psychomotor and sport opportunities for handicapped children and youth can be derived not by coupling professionals to mandates of PL 94-142, but rather, by jettisoning them from it.

Today, because the computer allows the adapted physical educator to bring with him a personalized instead of universal or massified product to school systems, the consequences of not providing appropriate psychomotor and sport activities for handicapped children and youth becomes dramatic. The traditional mechanical synchronization of public school system special education programs

which omit the spontaneity and pleasure of teaching and learning is on the way out. Instructional time and strategies themselves have changed in the real world and along with it the computer has changed the ground rules that once governed us as adapted physical educators.

Even though the computer is only a tool, it is one that can and will provide adapted physical educators with the capacity to surpass the scrutiny demanded by the excellence in education movement currently dictating policy in both curricular and extracurricular aspects of public schools today. In as much many adapted physical educators have "Technophobia" or fear of using computers, the following suggestions might be helpful in assisting adapted physical educators to integrate the computer into their psychomotor and/or sport programs for handicapped children and youth. These include:

1. Play with the computer; almost every school in the country has a computer - Play with it. Push the keys, turn it on/off, manipulate it any way possible. Most children learn how to use the computer by playing with it, not by specific instruction. Think of the computer as a toy and enjoy it. Since it is very difficult to "break" a computer, do not be afraid to play.

2. Ask questions; go to a computer dealer and ask to try out some different computers. Most are happy to explain features. Tell them individual needs for useage and most salespersons can "match" a computer to any application that one might have.

3. Get student help; there are bound to be numerous "computer experts" within any school system - students. If a teacher has access to a computer most students are thrilled to just use it, let alone help. Often they can teach teachers many shortcuts and applications that teachers never dreamed of. Many will do programming for no cost. Post a notice on the bulletin board indicating a need for computer help from students and they will be there in droves.

4. Borrow software; softwares are the programs to be used for whatever application is needed (i.e. grading, word processing, report/chart making, etc.). Borrow and use any software that is compatible with the available computer. Play with it, enter made-up data, experiment. After one has experimented with a variety of programs, then decide which would be most beneficial.

5. Read and Play; there are many fine "How to" computer books on the market. Many are designed for specific computers and/or software programs. Think of it as a correspondance course. However, make sure to start at the beginning of the book. As confidence in use grows, one can move to various chapters that have particular interest.

6. Trade software; most individuals (not companies) who have developed software programs are often honored and willing to make copies of their programs for people. Ask around. Usually all one has to do is provide a blank diskette (approx. $5.00) to the developer and he will make a copy. However, make sure that the program is compatible with your computer. Many universities have programs that they have developed and will disseminate. Write and ask.

The above suggestions are not designed to make adapted physical educators computer programmers. Rather, they are intended to familiarize teachers with computers by using them in an informal manner. In fact, that is how the RISPE data based computer program was created as opposed to a formalized training program. The key element in any familiarization process with computers is to play, not work, with them. It is also important to note that successful work utilization with a computer does not occur immediately. The user must first become acquainted and feel comfortable with the computer prior to demanding work related output from it. Early in this process some specific, encompassing software programs might have some professional applications.

The responsibility for change in providing psychomotor and sport opportunities for the handicapped rests with us. Adapted physical educators must begin with

themselves, by teaching themselves not to close their minds prematurely to the seemingly difficult or different. This also means fighting off the idea-killers who rush to suppress innovation while defending whatever now exists as appropriate, no matter how oppressive, absurd, insensitive, or unworkable it may be.

Above all, it means creating a new proactive approach to the physical development and opportunities for the handicapped before further disintegration of the limited opportunities they now possess are time-warped backward a generation making it impossiblefor them to maximize their potential. If we begin now, with the use of computer technology, we and our special education colleagues can take part in the dramatic rennovation not merely of the obsolete educational system, but of handicapped children and youth themselves. As Toffler (1980) stated, "Like the generation of the revolutionary dead, we have a destiny to create."

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